Abstract

A starter-generator (ISG) is mechanically connected to an internal combustion engine (BKM), comprises a bi-directional AC/DC converter (1), and can be connected to an accumulator (B1) by means of a first switch (S1), and connected to a double layer capacitor (DLC) by means of a second switch (S2). The accumulator (B1) is either connected to the double layer capacitor (DLC) by means of a control circuit (PWM), or the accumulator (B1) and the double layer capacitor (DLC) are connected to a bidirectional DC/DC converter (3) and to a second accumulator (B2) by means of a third switch (S3) and a fourth switch (S4).